

**3" Fume Extraction Arm** 

USER'S MANUAL

# **GRAPHIC SYMBOLS**



important information



3D file or preview available

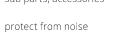


you will need tools, sub parts, accessories

or eye damage



keep away from source of high temperature





switch off before proceeding

|          | warnings,       |
|----------|-----------------|
| <u> </u> | important notes |

| 3 | use respiratory     |
|---|---------------------|
| 3 | protective equipmer |

| GENERAL INFORMATION                      | 3 |
|--|---|
| PRODUCT APPLICATION                      | 3 |
| OBJECTIONS                               | 3 |
| EQUIPMENT ARRIVAL                        | 3 |
| CONSTRUCTION                             | 4 |
| DIMENSIONS AND TECHNICAL DATA            | 4 |
| STATIC PRESSURE AND AIRFLOW PER DIAMETER | 6 |
| ARM INSTALLATION                         | 7 |
| SELF-SUPPORTING ARM REGULATION           | 7 |
| POSITIONING THE HOOD                     | 8 |
| LIGHT KIT (OPTION)                       | 8 |
| MAINTENANCE                              | 9 |
| TROUBLESHOOTING                          | 9 |
|  |   |

#### **GENERAL INFORMATION**

This instruction manual contains 3" standard and stainless steel fume extraction arms use and maintenance information. Users should become acquainted with the contents of this publication to learn about unit construction, principles of operation and means of its safe use. Manufacturer reserves the right to make changes to improve performance and operational properties of the product in the future without prior notice.

### PRODUCT APPLICATION

The 3" fume extraction arms are designed for capture of airborne pollutants at source. Thanks to the use of fume extraction arms, air pollutants can be captured before they enter the operator's breathing zone. Self-locking external joints with flexible hoses and grab handles around the hood make the arm operation easy and simple. Standard construction of 3" arms allow impurities to be captured at process of: soldering, welding, cutting, polishing or painting. Stainless steel fume arms are designed for extraction and purification of air from the dry dust in food, chemical and pharmaceutical industry (excluding corrosive, chemically aggressive, explosive and flammable gaseous mixtures).

## **OBJECTIONS**



#### Manufacturer does not recommend use of the unit for:

- work in an explosive environment and collection of explosive substances or gases
- work in welding and grinding processes (sparks generated during these processes and falling on the device will cause corrosion) - applies to stainless steel arms
- extraction of hot gases (more than 80°C/176°F continuously)
- sucking cigarettes, oiled tissues and other burning particles or objects
- · suction of liquid substances, oils, oil mist
- sticky liquids



- Store in dry and airy rooms.
- Protect against possibility of shifting during transport.



Manufacturer does not recommend use of the device for extraction of air from chemically aggressive dusts. Do not direct sparks generated in the grinding process directly into the arm nozzle.

Consult the manufacturer's representative if your application requires an alternative configuration or an extraction arm made of stainless steel.

# **EQUIPMENT ARRIVAL**

Upon arrival the user needs to thoroughly inspect the equipment for damage caused by the shipping carrier. If there is damage, the user needs to immediately contact us. Transport of the fume arms on a pallet can be done with a manually lifted forklift or a self-propelled lift truck. As a precaution please note "Subject to Inspection" on the bill of lading from the freight carrier, so any damage that is discovered can be reimbursed by the freight carrier.



The user should make sure that the items listed below were included with the device set:

- · User's manual
- · set of bolts and nuts

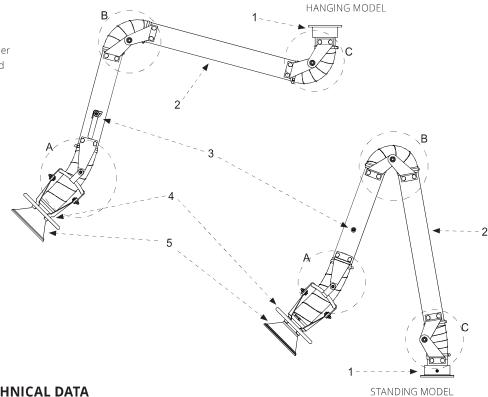
If there are any missing items on the order, please contact us as soon as possible

If the package or device is damaged upon delivery the user needs to immediately contact the dealer and draw up a protocol with a representative of the shipping company (many shipping companies consider acceptance of the shipment to be sufficient to avoid liability for damage caused

during shipping).

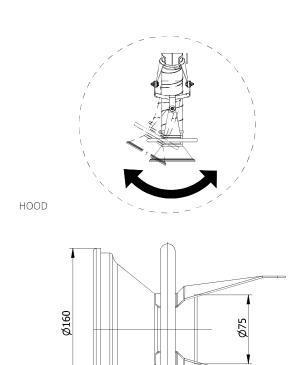
# **CONSTRUCTION**

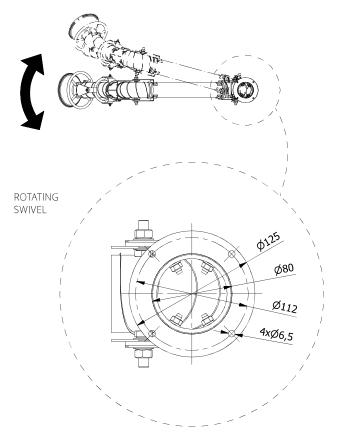
- 1. Rotating Swivel
- 2. Swivel Tube
- 3. Hood tube with airflow damper
- 4. Grab handle around the hood
- 5. Fume arm hood
- A. Hood joint
- B. Middle joint
- C. Swivel joint

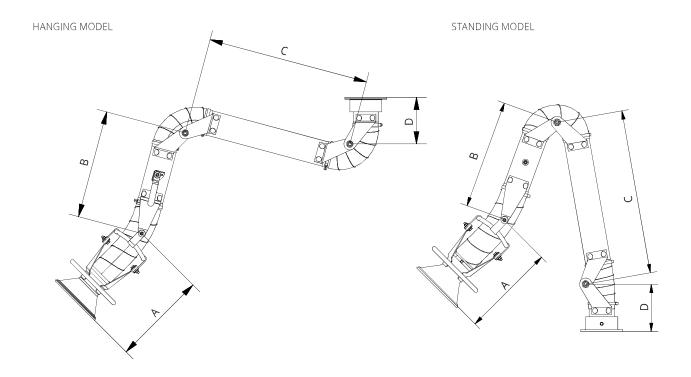


# **DIMENSIONS AND TECHNICAL DATA**

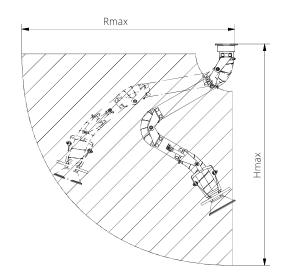
Maximum work temperature Nominal airflow Recommended maximum working pressurce 176°F 117-206 CFM 2.8 W.G.

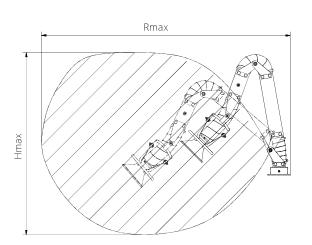






# WORKING RANGE OF THE FUME ARM

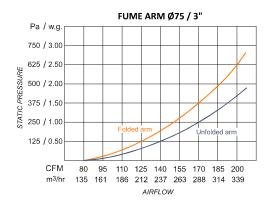


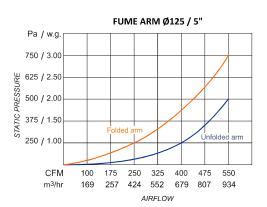


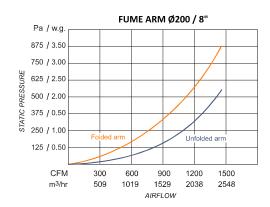
| Model | Arm's reach<br>[ft.] | A<br>[in] | B<br>[in] | C<br>[in] | D<br>[in] | Weight<br>[lb] | (Rmax)<br>[in] | (Hmax)<br>[in] |
|-------|----------------------|-----------|-----------|-----------|-----------|----------------|----------------|----------------|
| 0710  | 3                    | 11.2"     | 12.8"     | 19.1"     | 5.5"      | 11             | 46.9"          | 48.6"          |
| 0715  | 5                    | 11.2"     | 20.7"     | 27"       | 5.5"      | 14             | 63.2"          | 64.4"          |
| 0710P | 3                    | 11.2"     | 12.8"     | 19.1"     | 5.5"      | 11             | 47.2"          | 42.8"          |
| 0715P | 5                    | 11.2"     | 20.7"     | 27"       | 5.5"      | 14             | 63.2"          | 58.9"          |

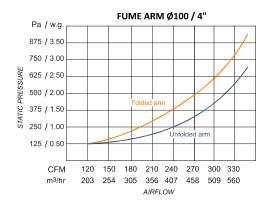
<sup>\*</sup> Standing model names end with letter P.

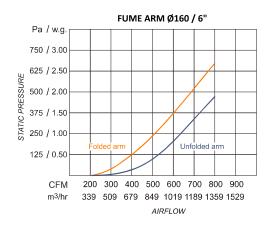
#### ARMS STATIC PRESSURE AND AIRFLOW PER DIAMETER

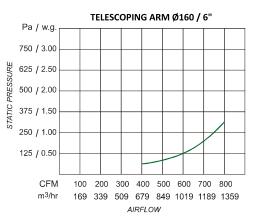












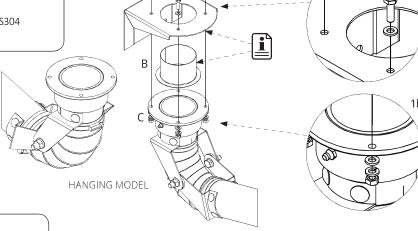
### **ARM INSTALLATION**

Fume extraction arms are delivered completely assembled and ready for installation.



Available accessories for the hanging version: STANDARD:

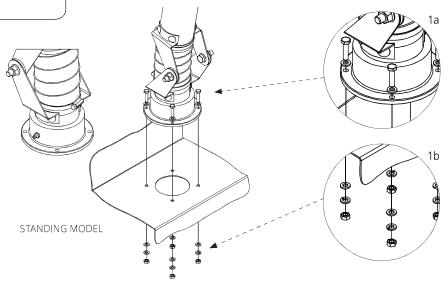
- · mounting bracket part number 212550
- connection flange part number 222029 STAINLESS STEEL:
- mounting bracket part number 212582-SS304
- · connection flange part number 222048
- A. Mounting bracket
- B. Connection flange
- C. Rotating Swivel



1a



Install the arm using M6x25 bolts with flat washers (1a), flat washers, spring washers and nuts (1b) which were delivered with the fume extraction arm.



## **SELF-SUPPORTING ARM REGULATION**

Correctly adjusted arms remain in place after set in position. Use metric wrenches size 17 mm to adjust the middle joint (B) and a swivel joint (C). Hood joint (A) adjust with metric wrench size 10 mm. Perform adjustments by tightening or loosening the self-locking nuts at each joint. The joints should be adjusted evenly on both sides of the device.

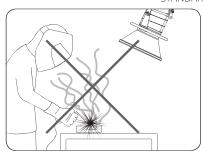


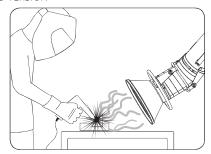
Do not move the arm beyond the perceptible resistance. Do not push standing arm models outside the vertical axis of rotation swivel.

# **POSITIONING THE HOOD**

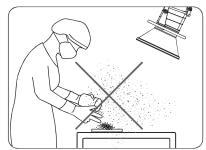
Due to the limited range of effective operation of the hood (rapid decrease in speed of catching with a change in the distance) is required to set the inlet in the immediate area of smoke emission.

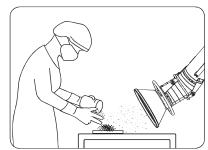
#### STANDARD VERSION





STAINLESS STEEL VERSION:





Many industrial applications involve extremely high pollution loads that can settle inside the extraction arm.

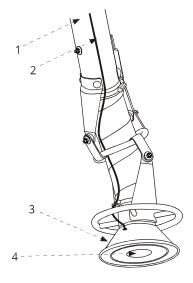
# **LIGHT KIT (OPTION)**

Standard extraction arms can have the hood additionally equipped with a LED light kit option. This option further increases performance and an operator's comfort.

- 1. Standard Fume Arm
- 2. Wire
- 3. Hood
- 4. LED light socket



- 3" fume arm can be additionally equipped with:
- MOD-L light kit
- · A set of grounding cables



# **MAINTENANCE**

| DAILY   | MONTHLY  | YEARLY   |
|---|--|--|
| Check the overall condition of the device including self-locking properties and the condition of the hoses. | Lubricate the rotating swivel with neutral to aluminum machine grease. | Remove the hoses and dean the inside of the arm. |

The manufacturer recommends to adjust the frequency of inspections of the arm, especially when the use of the arm is associated with a significant amount of captured pollutants.

# **TROUBLESHOOTING**

| SYMPTOMS                               | POSSIBLE REASONS                        | PROCEDURE  |  |
|--|---|--|--|
| Arm doesn't stay in position.          | Loose joints.                           | Adjust joints evenly on each side.                                       |  |
| Resistance during the rotation of arm. | Lack of lubrication in rotating swivel. | Inject grease through the grease fitting on rotating swivel.             |  |
| Low air flow.                          | Closed damper.                          | Open the damper.   |  |
|  | Blockage inside the arm.                | Take off the hose on joints, inspect the inside of the arm and clean it. |  |
|  | Elastic hose not properly mounted.      | Take off the hoses, put them back on and secure tightly with clamps.     |  |
|  | Damaged hose.                           | Replace the hose.  |  |

| Authorized representative |
|---------------------------|
|                           |